

ELECTRICAL SYMBOL SCHEDULE			
SYMBOL	DEVICE/FIXTURE DESCRIPTION	MOUNTING	COMMENTS
	MECHANICAL/PLUMBING EQUIPMENT CALLOUT		
	KITCHEN EQUIP. CALLOUT		
	KITCHEN EQUIP. CALLOUT, OR AS NOTED BY ARCH.		
	LUMINAIRE TYPE		
	DIAGRAM/DETAIL CALLOUT		
	CONDUIT RUN CONCEALED IN WALL OR CEILING		
	HOME RUN TO PANEL		
	FUSE		
	GROUND/GROUND ROD		
	CIRCUIT BREAKER		
ABBREVIATIONS			
A AMPS	ENT ELEC. NON-METAL TUBING	NL NIGHT LIGHT, BYPASS LOCAL SWITCHING	
APC AVAILABLE FAULT CURRENT	ER EXISTING TO BE RELOCATED	PC PLUMBING CONTRACTOR	
AFF ABOVE FINISHED FLOOR	EX EXISTING TO REMAIN	POC POINT OF CONNECTION	
APF ABOVE FINISHED GRADE	FWC FLEXIBLE METAL CONDUIT	POS POINT OF SALE	
AIC AMPS INTERR. CAPACITY	GC GENERAL CONTRACTOR	P RECEIVER	
AWG AMERICAN WIRE GAUGE	GEC GRND. ELEC. COND. AT SES	RM ROOF MOUNTED	
BC BARE COPPER	GFCI GRND. FLT. CURR. INTERR.	RMC RIGID METALLIC CONDUIT	
BFC BELOW FINISHED CEILING	GND GROUND	RNC RIGID NON-METALLIC COND.	
BFG BELOW FINISHED GRADE	IG ISOLATED GROUND	SBJ SYSTEM BONDING JUMPER	
C CONDUIT	KCML 1000 CIRCULAR MILS (KCM)	SCA SHORT CIRCUIT AMPERES	
CHD CONDUIT	LFNC LIQUID-TIGHT FLEX. METAL COND.	T TRANSMITTER	
CO CONDUIT ONLY	LFNC LIQUID-TIGHT FLEX. NON-METAL COND.	TC TEMP. CONTROL CONTR.	
CT CURRENT TRANSDUCE	MC MECHANICAL CONTRACTOR	UG UNDERGROUND	
CJ COPPER MATERIAL	VA VOLT/AMPS	UNO UNLESS NOTED OTHERWISE	
DED DEDICATED	MCA MINIMUM CIRCUIT AMPS	VF VERIFY IN FIELD	
DFA DROP FROM ABOVE	N1 NEMA 1	WP WEATHERPROOF/NEMA	
EC ELECTRICAL CONTRACTOR	NSR NEMA 3R	XR EXISTING TO BE REMOVED	
EF EXHAUST FAN	N NEW		
EM EMER./EGRESS BATTERY			
EMT ELEC. METALLIC TUBING			
NOTES			
(1)	SEE LUMINAIRE SCHEDULE FOR FIXTURE TYPES AND DETAILS.		
(2)	SEE LUMINAIRE SCHEDULE FOR MOUNTING REQUIREMENTS.		
(3)	WIRE LIGHT FIXTURE FROM ADJACENT J-BOX		
(4)	CONNECT NEAREST UN-SWITCHED HOT CONDUCTOR TO EMERGENCY BALLAST		
(5)	DIRECTIONAL ARROWS INDICATE REQUIRED CHEVRONS		
(6)	COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL INTERIOR ELEVATIONS		
(7)	USE WITH POWER PACK		
(8)	"X" IN SYMBOL IS INCHES BETWEEN RECEPTACLE ALONG WIREWAY. SEE DRAWINGS.		
(9)	PROVIDE UL LISTED DEVICE COMPATIBLE WITH THE FIRE ALARM PANEL SYSTEM.		
(10)	MATCH THE VOLTAGE OF THE RELAY WITH THAT OF THE CONTROLLING CIRCUIT.		
(11)	USE A 4" X 4" BOX WITH A MUD RING TO MATCH THE DEVICE AND INSTALLATION.		
(12)	PROVIDE MUD RING AND/OR BOX COVER APPROPRIATE FOR DEVICE/FIXTURE SERVED.		
(13)	USE HEAVY DUTY DEVICE FOR 480 VOLT.		
(14)	SIZE TO THE EQUIPMENT BEING CONTROLLED		
(15)	FIRE ALARM PANELS: FACP: FIRE ALARM CONTROL PANEL, NAC: NOTIFICATION APPLIANCE CIRCUIT PANEL, ANNUN: GRAPHIC ANNUNCIATOR PANEL, AND SES: SMOKE EVACUATION SYSTEM PANEL		
(16)	LIGHT FIXTURES ARE SCALED WITHIN THE DRAWINGS BASED ON ACTUAL DIMENSIONS.		

ELECTRICAL SYMBOL SCHEDULE			
SYMBOL	DEVICE/FIXTURE DESCRIPTION	MOUNTING	COMMENTS
	TELEPHONE OUTLET	18"	
	TELEPHONE OUTLET, CUSTOM HEIGHT		(6)
	TELEPHONE/DATA OUTLET, 2 CABLE DROPS (1 PINK FOR VOIP, 1 WHITE FOR DATA), ATTRIBUTE = SET QTY	18"	
	DATA OUTLET, 1 WHITE DATA DROP UNLESS INDICATED OTHERWISE	18"	
	DATA OUTLET, CUSTOM HEIGHT		(6)
	DATA OUTLET, ATTRIBUTE SIGNIFIES PORT QUANTITY	18"	
	WIRELESS ACCESS POINT DATA OUTLET, 1 CABLE DROP PINK	CEILING	
	TELEVISION OUTLET	AS NOTED	(6) (11)
	SPEAKER	CEILING	
	SPEAKER, WALL	AS NOTED	(11)
	VOLUME CONTROL, WALL	4'-0"	(11)
	MICROPHONE, WALL	AS NOTED	(11)
	SECURITY CAMERA, 1 CABLE DROP PINK	CEILING	
	SECURITY CAMERA, WALL, 1 CABLE DROP PINK	AS NOTED	(11)
	CARD READER	4'-0"	(11)
	DOOR CONTACT	DOOR	(9) (11)
	KEYPAD	+48"	(9) (11)
	MOTION SENSOR - CEILING	CEILING	(9) (11)
	MAIN DISTRIBUTION FRAME	6'-6" TO TOP	
	MAIN TELEPHONE BOARD	6'-6" TO TOP	
	SECURITY PANEL, SURFACE	AS NOTED	
	SMOKE DETECTOR	CEILING	(9) (11)
	DUCT SMOKE DETECTOR	SEE MECH.	(9)
	FIRE/SMOKE DAMPER	SEE MECH.	
	HEAT DETECTOR	CEILING	(9) (11)
	FIRE ALARM MANUAL PULL STATION	4'-0"	(9) (11)
	FIRE ALARM STROBE, ATTRIBUTE SIGNIFIES CANDELA RATING	8'-0"	(9) (11)
	FIRE ALARM HORN STROBE, ATTRIBUTE SIGNIFIES CANDELA RATING	8'-0"	(9) (11)
	FIRE SPRINKLER FLOW BELL	8'-0" AFF	(9)
	ELECTRO MAGNETIC DOOR HOLDER	AS NOTED	
	RELAY MODULE		(9)
	MONITOR MODULE		(9)
	CONTROL MODULE		(9)
	TAMPER SWITCH		(9)
	FLOW SWITCH		(9)
	FIRE RISER	SEE PLANS	
	FIRE ALARM PANEL, SURFACE	AS NOTED	(15)
	FIRE ALARM PANEL, RECESSED	AS NOTED	(15)

ELECTRICAL SYMBOL SCHEDULE			
SYMBOL	DEVICE/FIXTURE DESCRIPTION	MOUNTING	COMMENTS
	(S) (D) (Q) (S) SIMPLEX (D) DUPLEX (Q) QUADPLEX OR DOUBLE DUPLEX		
	STANDARD CONVENIENCE OUTLET	18"	
	CONVENIENCE OUTLET, GFCI	18"	
	STANDARD CONVENIENCE OUTLET, EMERGENCY	18"	
	STANDARD CONVENIENCE OUTLET, CUSTOM HEIGHT		
	CONVENIENCE OUTLET, GFCI, CUSTOM HEIGHT		
	CONVENIENCE OUTLET, FLOOR	FLOOR	
	CONVENIENCE OUTLET, CEILING	CEILING	
	COMBINATION POWER/COMMUNICATION FLOOR BOX	FLOOR	
	SPECIAL PURPOSE OUTLET		
	DIRECT CONNECTION TO EQUIPMENT		
	CORD DROP OUTLET	SUSPENDED	
	POWER/VOICE-DATA SERVICE POLE	AS NOTED	
	VARIABLE FREQUENCY DRIVE		
	TRANSIENT VOLTAGE SURGE SUPPRESSION		
	JUNCTION BOX	AS NOTED	(12)
	JUNCTION BOX, WALL	AS NOTED	(12)
	MANUAL SWITCH WITH THERMAL OVERLOAD		
	PUSH BUTTON SWITCH, DOUBLE	AS NOTED	
	EMERGENCY POWER OFF (EPO) SWITCH		
	NON-FUSED DISCONNECT SWITCH		(13) (14)
	FUSED DISCONNECT SWITCH		(13) (14)
	MAGNETIC STARTER		(13) (14)
	MAGNETIC STARTER WITH FUSED DISCONNECT		(13) (14)
	POWER RELAY		(13) (14)
	MOTOR OUTLET		
	MOTOR OUTLET, ROOF MOUNTED	ROOF	
	CABLE TRAY		
	MAIN DISTRIBUTION POWER PANEL		
	PANEL BOARD, SURFACE	6'-6" TO TOP	(15)
	PANEL BOARD, RECESSED	6'-6" TO TOP	(15)

ELECTRICAL SYMBOL SCHEDULE			
SYMBOL	DEVICE/FIXTURE DESCRIPTION	MOUNTING	COMMENTS
	LINEAR LIGHT FIXTURE	CEILING	(1) (2) (3) (16)
	LINEAR EMERGENCY LIGHT FIXTURE	CEILING	(1) (2) (3) (16)
	RECESSED LIGHT FIXTURE	CEILING	(1) (3)
	RECESSED WALL WASH LIGHT FIXTURE	CEILING	(1) (3)
	CEILING LIGHT FIXTURE	CEILING	(1) (2)
	PENDENT/CHANDELIER LIGHT FIXTURE	SUSPENDED	(1) (2) (3)
	WALL LIGHT FIXTURE, SURFACE	AS NOTED	(1) (2)
	WALL LIGHT FIXTURE, RECESSED	AS NOTED	(1) (2)
	TRACK LIGHT FIXTURE WITH TRACK	CEILING	(1) (2) (3)
	CEILING FAN	SUSPENDED	
	FLOOD/LANDSCAPE/MONUMENT LIGHT FIXTURE	GROUND	(1) (2) (3)
	AREA LIGHT FIXTURE	POLE	(1) (2)
	AREA LIGHT DOUBLE FIXTURE	POLE	(1) (2)
	EXIT SIGN, WALL	7'-6"	(1) (2) (4) (5)
	EXIT SIGN	CEILING	(1) (4) (5)
	EMERGENCY LIGHT FIXTURE, WALL	7'-6"	(1) (2)
	PHOTO-ELECTRIC CELL	AS NOTED	
	POWER PACK	CEILING	
	DUAL TECHNOLOGY VACANCY SENSOR	CEILING	(7)
	DUAL TECHNOLOGY VAC. SENSOR, WALL	AS NOTED	(7)
	DAYLIGHT SENSOR	CEILING	
	SINGLE POLE SWITCH	4'-0"	
	THREE WAY SWITCH	4'-0"	
	THREE WAY SWITCH ATTRIBUTE SIGNIFIES FIXTURE SWITCHING	4'-0"	
	FOUR WAY SWITCH	4'-0"	
	DIMMER SWITCH	4'-0"	
	LOW VOLTAGE SWITCH	4'-0"	
	TIME CLOCK	AS NOTED	
	LIGHTING CONTROL PANEL, SURFACE	6'-6" TO TOP	
	LIGHTING CONTROL PANEL, RECESSED	6'-6" TO TOP	

GENERAL NOTES

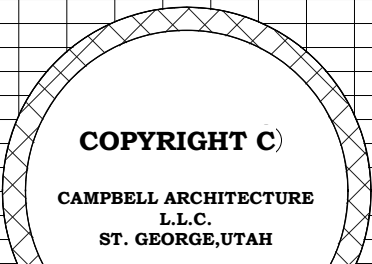
- THE ELECTRICAL SYSTEMS DEFINED BY THESE PLANS AND SPECIFICATIONS ARE TO BE CONSTRUCTED AS COMPLETE AND OPERABLE. SYSTEMS AND SHALL BE BID WITH THIS INTENT. THE CONTRACTOR SHALL VISIT THE SITE, READ ALL THE RELEVANT DOCUMENTS AND BECOME FAMILIAR WITH THE TYPE OF CONSTRUCTION AND WORK TO BE ACCOMPLISHED. SHOULD ANY ERROR, OMISSION OR CONFLICT EXIST IN EITHER THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING BEFORE SUBMITTING HIS BID PRICE SO A CHANGE CAN BE ISSUED IN A PRE-BID ADDENDUM. OTHERWISE, THE CONTRACTOR AND/OR EQUIPMENT SUPPLIER SHALL SUPPLY THE PROPER MATERIALS AND LABOR TO INSTALL COMPLETE AND OPERABLE SYSTEMS AT THEIR OWN EXPENSE. WHEN EACH ELECTRICAL SYSTEM IS COMPLETE, THE CONTRACTOR SHALL TEST AND CONFIRM IT'S PROPER OPERATION. ANY INCOMPLETE SYSTEM SHALL BE MADE COMPLETE AND OPERABLE.
- THE ARCHITECTURAL AND MECHANICAL PLANS ARE CONSIDERED A PART OF THE ELECTRICAL DOCUMENTS SO FAR AS ANY ELECTRICAL ITEMS THEY MAY CONTAIN. THE ELECTRICAL CONTRACTOR SHALL REFER TO AND COORDINATE WITH THEM. NO EXTRA COST SHALL BE ALLOWED FOR FAILURE TO COORDINATE THE CONTRACT DOCUMENTS WITH OTHER TRADES AND/OR IF EQUIPMENT DIMENSIONS ARE GREATER THAN SPECIFIED AND/OR DIMENSIONED ON THE PLANS.
- NO ADDITIONS TO THE CONTRACTOR BID WILL BE ALLOWED FOR CHANGES MADE NECESSARY BY INTERFERENCE WITH OTHER WORK.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE EQUIPMENT, MATERIALS AND LABOR FOR THE CONNECTIONS OF ALL EQUIPMENT SHOWN ON THE PLANS - ARCHITECTURAL, MECHANICAL, ETC.
- THIS PROJECT IS TO BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL AND STATE CODES AND THE NEC. IF AT ANY TIME DURING CONSTRUCTION, OR AFTER, SOMETHING IS FOUND TO BE INSTALLED IN VIOLATION OF THE CODES LISTED ABOVE, IT SHALL BE CORRECTED AT THE CONTRACTORS EXPENSE.
- ALL EQUIPMENT PROVIDED BY THE ELECTRICAL CONTRACTOR SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, AND BE PROPERLY INSTALLED FOR THE CONDITIONS AND SPACE THAT EQUIPMENT IS BEING INSTALLED WITHIN.
- THE ELECTRICAL CONTRACTOR SHALL INSTALL A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN EACH CONDUIT RUN. CONDUIT SHALL NOT BE USED AS AN EQUIPMENT GROUNDING CONDUCTOR. THE ELECTRICAL CONTRACTOR SHALL GROUND THE ELECTRICAL SYSTEM IN ACCORDANCE WITH LOCAL AND NATIONAL CODES.
- THE ELECTRICAL CONTRACTOR SHALL CONFIRM MINIMUM CODE (NEC) WORKING CLEARANCE BEFORE INSTALLING ANY ELECTRICAL PANELS OR CABINETS AND SHALL MOVE THE PANELS AT HIS EXPENSE IF REJECTED BY AN INSPECTOR. IF CLEARANCE IS NOT POSSIBLE, THE DESIGNER SHALL BE NOTIFIED IMMEDIATELY IN WRITING.
- CONDUIT LAYOUTS SHOWN ON THE PLANS ARE DIAGRAMATIC, NOT INDICATING THE ROUTING REQUIRED. THE EC SHALL ROUTE THE CONDUITS AS REQUIRED BY THE CONDITIONS OF THE INSTALLATION AND SHALL COORDINATE WITH DUCTWORK, PIPING, EQUIPMENT, BUILDING STRUCTURE AND OTHER POTENTIAL OBSTRUCTIONS.
- THE CONTRACTOR SHALL ALLOW THE MOVEMENT, BEFORE ROUGH-IN, OF ANY ELECTRICAL PANEL, DEVICE, LUMINAIRE, ETC. A DISTANCE OF 10 FEET WITHOUT REQUIRING ADDITIONAL COST TO THE PROJECT.
- THE ELECTRICAL CONTRACTOR SHALL SECURE ALL CONDUIT TO THE STRUCTURE AS IT IS SET IN PLACE USING INDUSTRY STANDARD METHODS AND PRACTICES.
- MINIMUM SIZE CONDUIT SHALL BE 3/4". ABOVE GROUND CONDUIT SHALL BE EMT WITH STEEL SET SCREW FITTINGS. UNDERGROUND CONDUIT SHALL BE PVC (SCH40) WITH GRC ELBOWS AND RISERS WRAPPED IN CORROSION RESISTANT MATERIALS WHERE IN DIRECT CONTACT WITH THE SOIL.
- FLEXIBLE CONDUIT SHALL BE LIMITED TO CONNECTIONS TO LIGHT FIXTURES AND FINAL CONNECTIONS TO MOTORS OR OTHER EQUIPMENT SUBJECT TO VIBRATION. LENGTHS OF FLEXIBLE OR SEALTITE CONDUIT SHALL NOT BE GREATER THAN 72" INCHES.
- WIRING DEVICES SHALL MATCH EXISTING COLOR AND FACEPLATE TYPE.
- TO ASSURE ALL DEVICES ARE RIGIDLY SET, THE ELECTRICAL CONTRACTOR SHALL SECURE ALL DEVICE BOXES WITH BRACKETS, HANGERS, ETC. DESIGNED FOR THE APPLICATION. ANY DEVICE BOXES NOT SECURED WILL BE MADE SECURE AT THE CONTRACTORS EXPENSE.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL EMPTY CONDUITS WITH 200LB RATED NYLON PULL CORD.
- BEFORE ANY ELECTRICAL CONDUIT, BOXES, ETC. ARE COVERED (FLOOR, CEILINGS, WALLS, ETC.), THEY SHALL BE APPROVED BY THE INSPECTING OFFICER (INSPECTOR). THE UNCOVERING AND REPLACEMENT OF ELECTRICAL WORK FOR THE INSPECTION PURPOSES WILL BE AT THE COST OF THE ELECTRICAL CONTRACTOR.
- ALL BATTERY POWERED OR CONTINUOUS BURN LUMINAIRES SHOWN ON THE PLANS, SUCH AS EXIT LIGHTS, NIGHT LIGHTS, OR EMERGENCY LIGHTS, SHALL BE CONNECTED TO THE UN-SWITCHED LEGS OF THE LIGHTING CIRCUIT FEEDING THAT AREA.
- LUMINAIRES INSTALLED IN THE MECHANICAL ROOM SHALL BE PLACED SO THAT ALL EQUIPMENT IS ADEQUATELY ILLUMINATED AFTER THE MECHANICAL EQUIPMENT IS IN PLACE.
- ALL LUMINAIRES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE AND NOT SOLELY FROM THE CEILING GRID OR OTHER NONSTRUCTURAL MEMBER.
- WHERE WIRE SIZE IS NOT SHOWN ON THE DRAWINGS FOR 20A, 120/277VAC BRANCH CIRCUITS, THE CIRCUIT SHALL CONSIST OF 2#12(CU, THHN/THWN-2)+1#12(CU, THHN/THWN-2)/GND IN 3/4" EMT CONDUIT. THIS WIRE SIZE SHALL BE INCREASED TO #10(CU, THHN) FOR 120VAC BRANCH CIRCUITS WITH OVERALL LENGTHS EXCEEDING 125 TO ACCOMMODATE FOR VOLTAGE DROP. REFER TO EQUIPMENT SCHEDULES, FEEDER SCHEDULES AND NOTES ON DRAWINGS FOR ALL OTHER BRANCH CIRCUIT AND FEEDER WIRE/CONDUIT SIZING.
- CONDUCTORS SHALL BE COPPER, 800VAC RATED, TYPE THHN/THWN-2 UNLESS OTHERWISE NOTED. CONDUCTORS SIZES UP TO #10AWG SHALL BE SOLID AND #8AWG AND LARGER SHALL BE STRANDED.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH EQUIPMENT SUPPLIERS ON THE EXACT LOCATIONS OF ALL EQUIPMENT AND ELECTRICAL CONNECTIONS PRIOR TO ROUGH-IN. THE ELECTRICAL CONTRACTOR SHALL MAKE THE FINAL CONNECTION TO ALL EQUIPMENT UNLESS OTHERWISE DIRECTED BY THE EQUIPMENT SUPPLIER.
- THE ELECTRICAL CONTRACTOR SHALL CLEAN THE ENTIRE ELECTRICAL SYSTEM AFTER COMPLETION OF THE INSTALLATION. REMOVE ALL FINGER PRINTS, FOREIGN MATTER, PAINT, DIRT, GREASE, UN-NEEDED LABELS OR STICKERS FROM FIXTURES AND EQUIPMENT. REMOVE ALL RUBBISH AND DEBRIS ACCUMULATED DURING INSTALLATION FROM THE PREMISES.
- OBTAIN FROM SUPPLIERS ALL WIRING DIAGRAMS FOR EQUIPMENT PRIOR TO ANY ROUGH-IN. TO ASSURE THAT PROPER CHARACTERISTICS ARE PROVIDED, ANY INCORRECT WIRING OR DEVICES INSTALLED BY THE ELECTRICAL CONTRACTOR WITHOUT THE WIRING DIAGRAM SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. PROVIDE COPIES OF WIRING DIAGRAMS WITHIN EACH PIECE OF EQUIPMENT AND ADDITIONAL COPIES WITH THE OPERATION AND MAINTENANCE MANUALS.
- IT IS THE INTENT OF THE CONSTRUCTION DOCUMENTS FOR ALL DEVICES TO BE FLUSH MOUNTED AND CONDUIT/CABLING INSTALLED CONCEALED WITHIN WALLS/CEILINGS. IN AREAS WHERE CONDUIT MUST BE INSTALLED EXPOSED IT SHALL BE COORDINATED WITH THE ARCHITECT AND/OR ENGINEER. ALL EFFORTS SHALL BE MADE TO CONCEAL WIRING METHODS.
- SUBMIT A SCALED LAYOUT (1/4"=1') OF ALL ELECTRICAL ROOMS BASED ON THE ELECTRICAL GEAR AND EQUIPMENT SUBMITTALS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE STRUCTURED CABLING FROM EACH TELE/DATA/CATY OUTLET TO THE TELEPHONE/DATA BOARD/RACK. THE CABLE SHALL BE LABELED ON EACH END FOR PROPER IDENTIFICATION BEFORE THE CABLE ENDS ARE TERMINATED. THE ELECTRICAL CONTRACTOR SHALL TERMINATE THE CABLES IN THE OUTLET AND IN THE PATCH PANEL OR BLOCK ON THE TELEPHONE TERMINAL BOARD AND/OR RACK.
- ALL TELECOMMUNICATIONS WIRING SHALL BE INSTALLED WITHIN CONDUIT UNLESS INSTALLED ABOVE ACCESSIBLE CEILINGS. MINIMUM CONDUIT SIZE FOR TELECOMMUNICATIONS CABLING SHALL BE 1.25" EMT, UNLESS OTHERWISE NOTED. IN AREAS WHERE EXPOSED WIRING ABOVE CEILINGS IS INSTALLED WITHIN PLENUM SPACES, THE TELECOMMUNICATIONS WIRING SHALL BE PLENUM RATED. ALL TELE/DATA CABLING SHALL BE CATEGORY 6A RATED WITH PINK OUTER JACKET FOR VOIP AND WHITE OUTER JACKET FOR COMPUTER EQUIPMENT (I.E. ROUTERS, SWITCHES, SERVERS, ETC.) SHALL BE PROVIDED AND INSTALLED BY OWNER.

SHEET INDEX

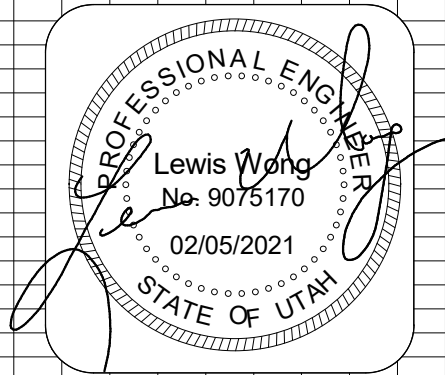
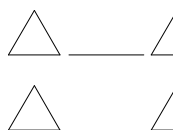
EE001	ELECTRICAL SYMBOLS AND NOTES
EE501	ELECTRICAL DETAILS
EP101	POWER PLAN
EY101	SYSTEMS PLAN



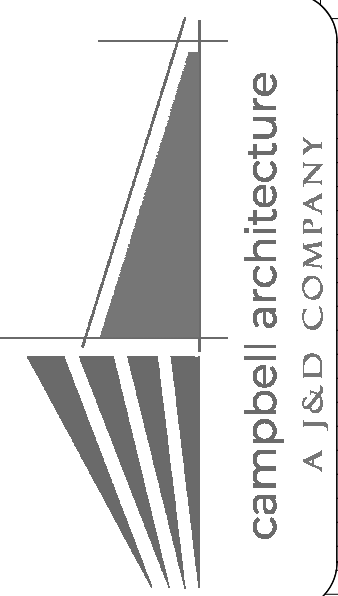
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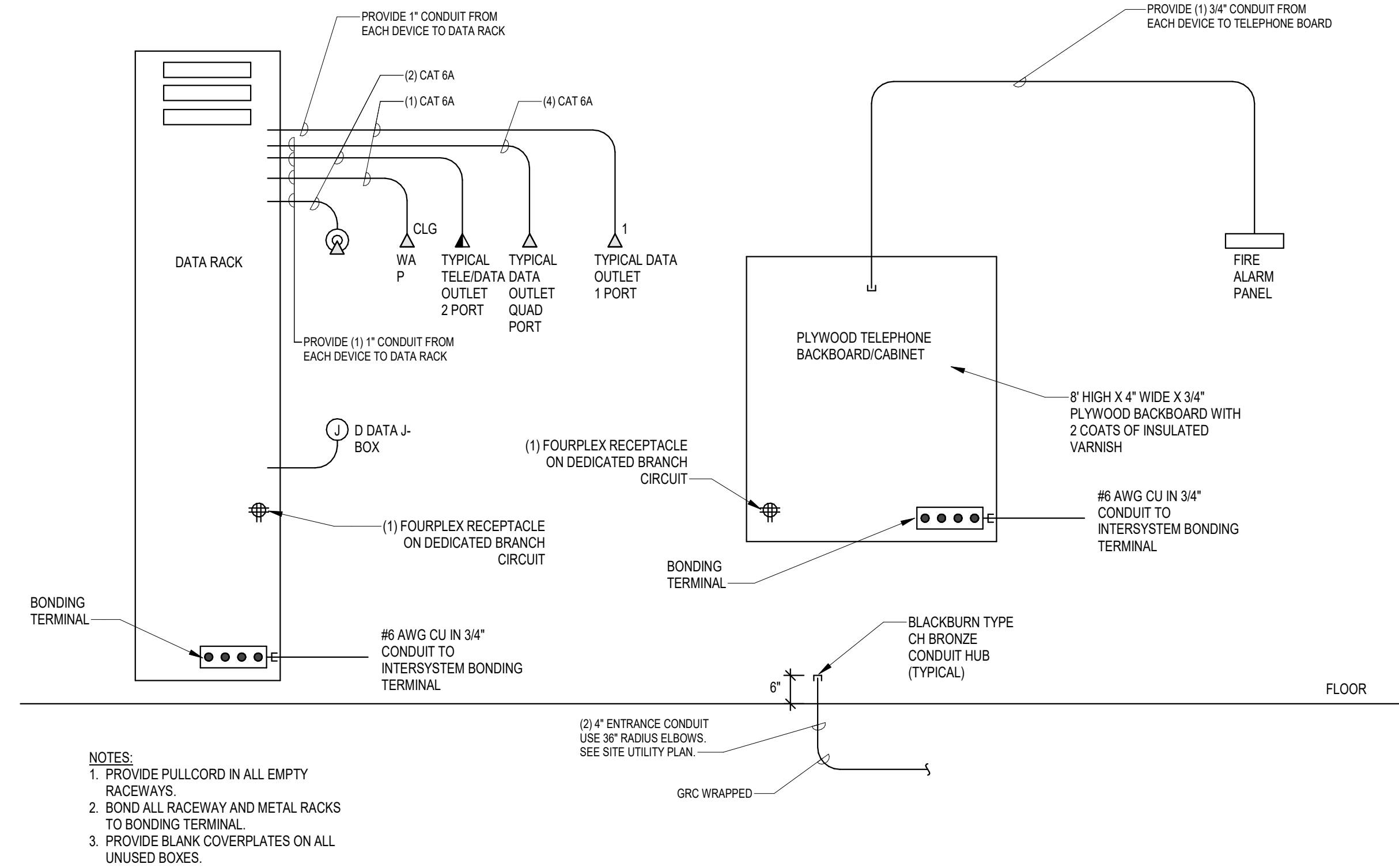


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ELECTRICAL
SYMBOLS AND
NOTES

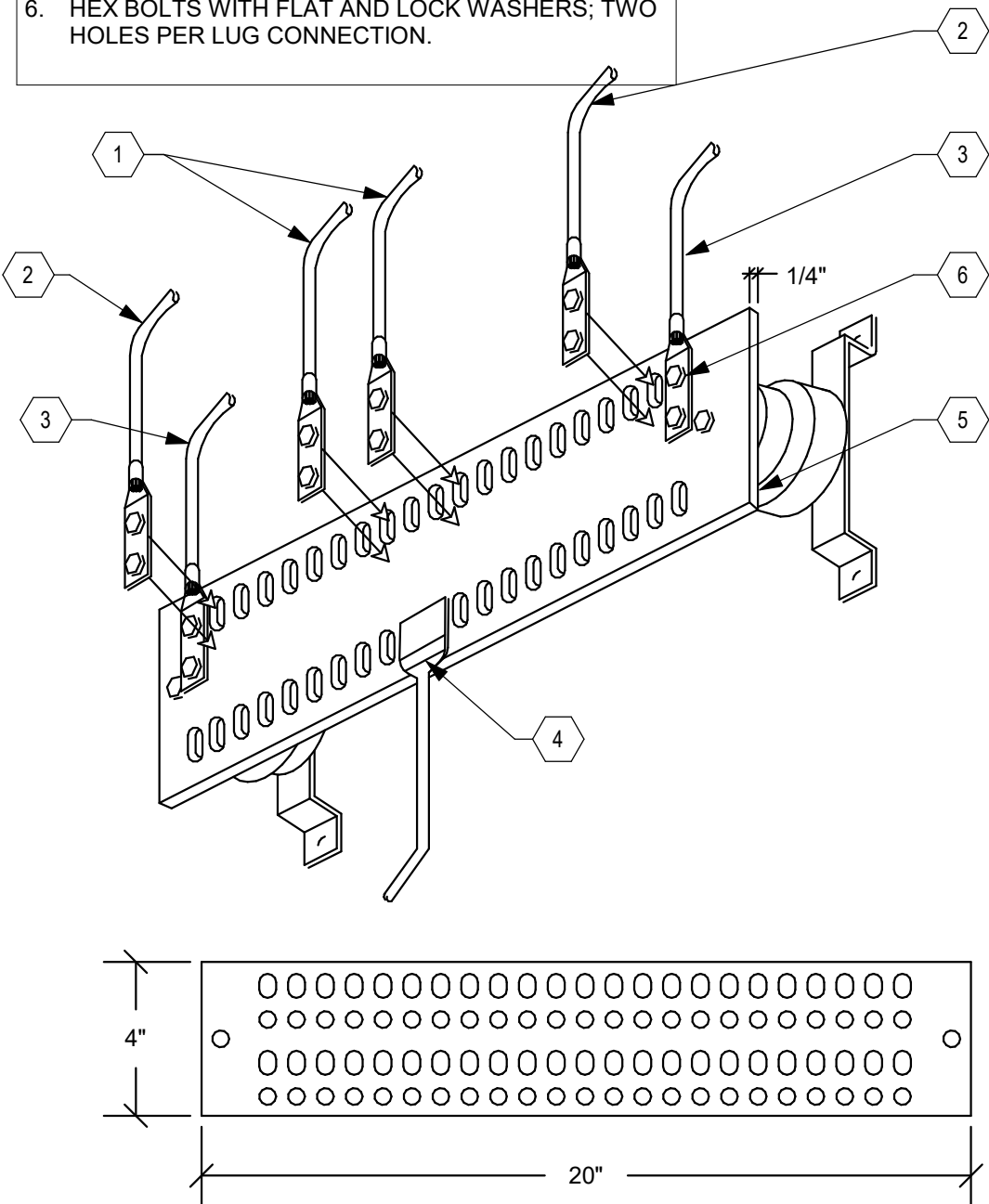
EE001



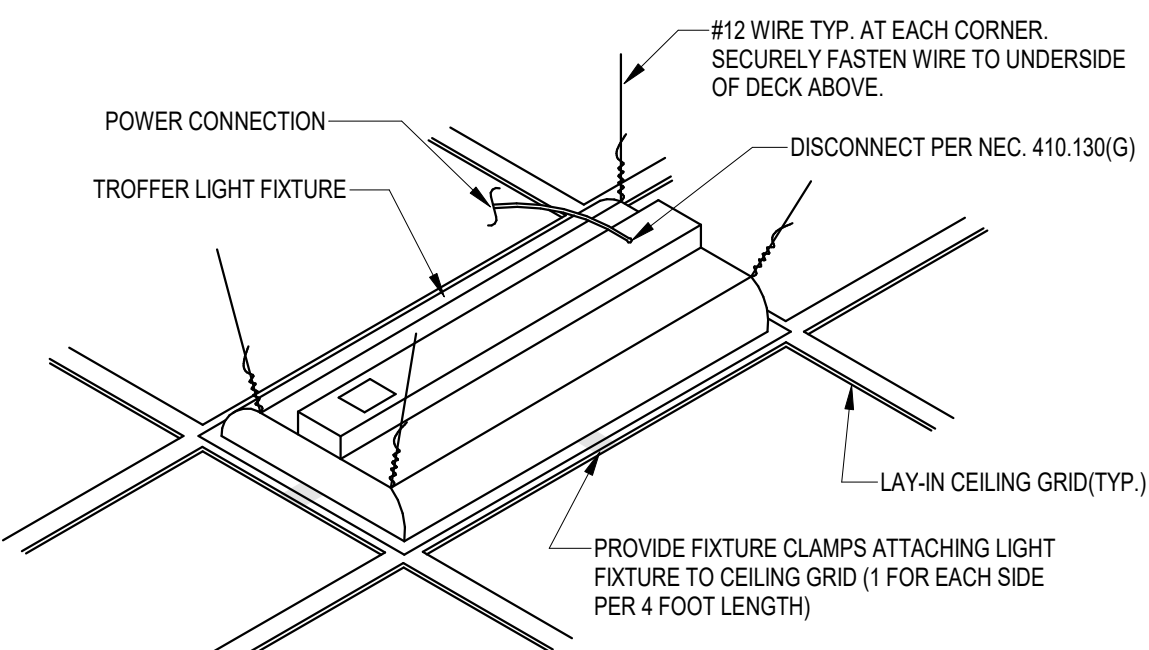
2 TELEPHONE/DATA RACEWAY DIAGRAM
EE501 NO SCALE

INTERNAL MASTER GROUND BUS BAR KEYED NOTES:

1. GROUND LEADS FROM CABINETS AND RACKS SECOND OUTSIDE POSITION SHALL ALWAYS BE THE SURGE SUPPRESSION RACK GROUND.
2. OUTSIDE POSITION OF MGB SHALL ALWAYS BE TAKEN BY IPGB/HALO GROUND RING.
3. CAD WELD #2 AWG TINNED SOLID BARE COPPER WIRE OR APPROVED 2-HOLE LUG PER R56 STANDARDS TO OUTSIDE GROUND. WALL PENETRATION TO BE 45°.
4. 4"x20" BARE OR TINNED SOLID ALLOY 110 COPPER GROUND BUS BAR.
5. HEX BOLTS WITH FLAT AND LOCK WASHERS; TWO HOLES PER LUG CONNECTION.



4 GROUNDING BUS BAR DETAIL
EE501 NO SCALE

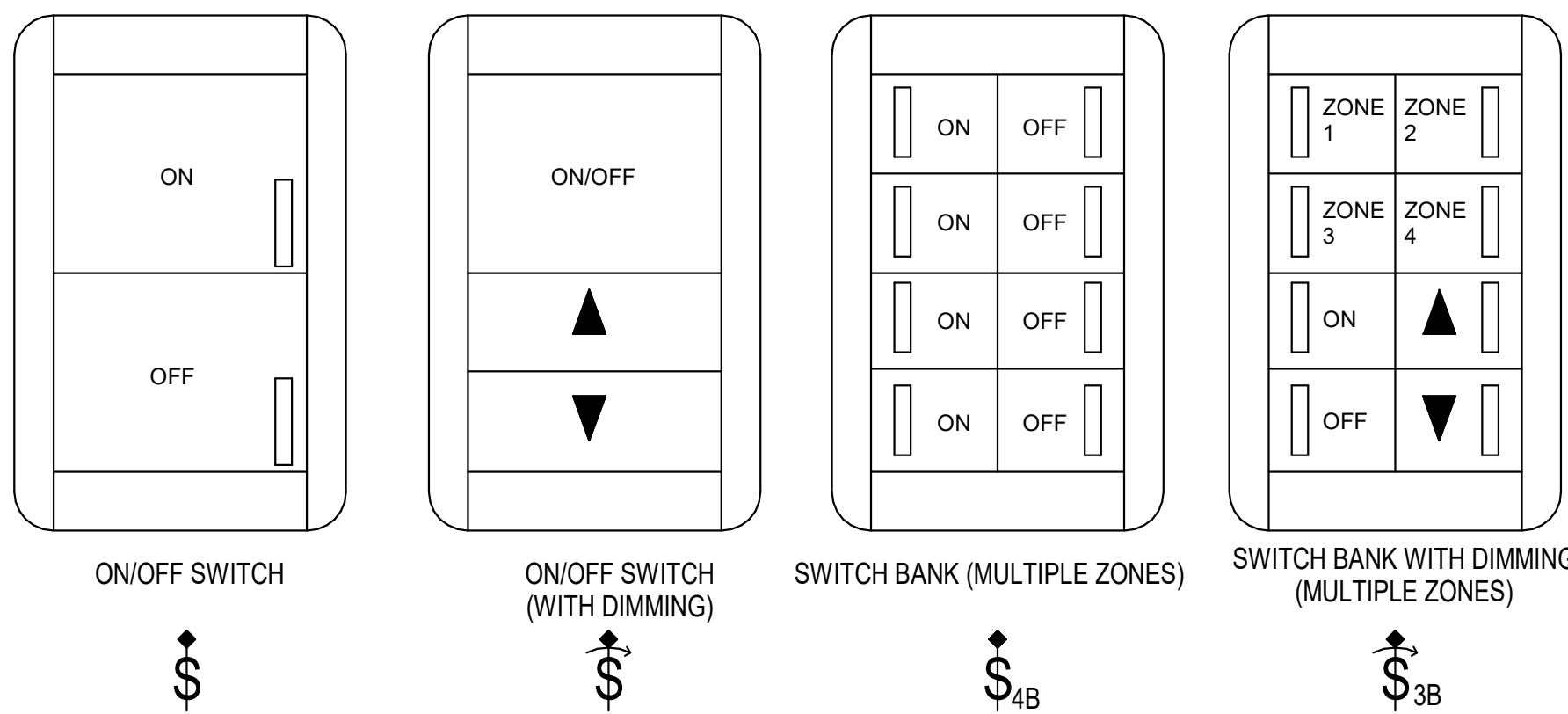


7 RECESSED FIXTURE MOUNTING DIAGRAM
EE501 NO SCALE

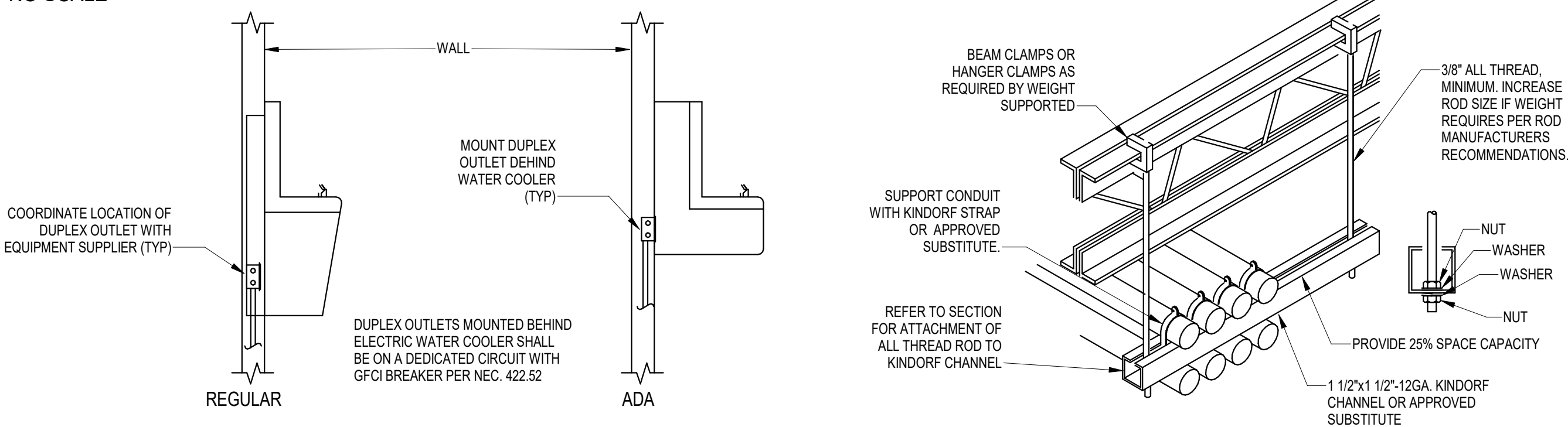
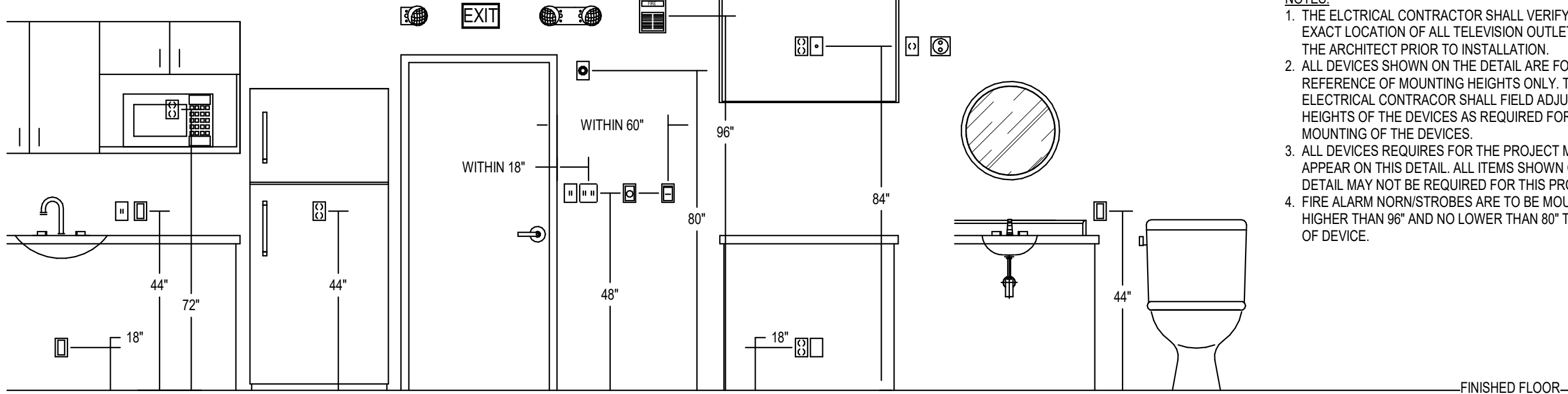
NOTES:

1. TYP. FOR WOOD AND METAL STUD ROUGH-IN.
2. PLASTER RINGS NOT SHOWN. COORDINATE RING DEPTH TO BE FLUSH WITH FINISHED SURFACE, UNLESS NOTED OTHERWISE.
3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCH. AND MECH. DRAWINGS, AND WITH ALL APPLICABLE SHOP DRAWINGS.
4. OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITIONS IN THE SAME STUD SPACE MUST BE SEPARATED BY A MIN. OF 6" HORIZONTAL DISTANCE.
5. ELECTRICAL BOXES INSTALLED IN FIRE RESISTANT WALLS OR PARTITIONS SHALL COMPLY WITH IBC 714.3.2.
6. INSULATED THOAT EMT CONNECTOR.
7. CADDY FASTENER, THROUGH STUD CABLE/CONDUIT SUPPORT FB12P.
8. ADJUSTABLE BAR HANGER.
9. TYPICAL DEVICE JUNCTION BOX.

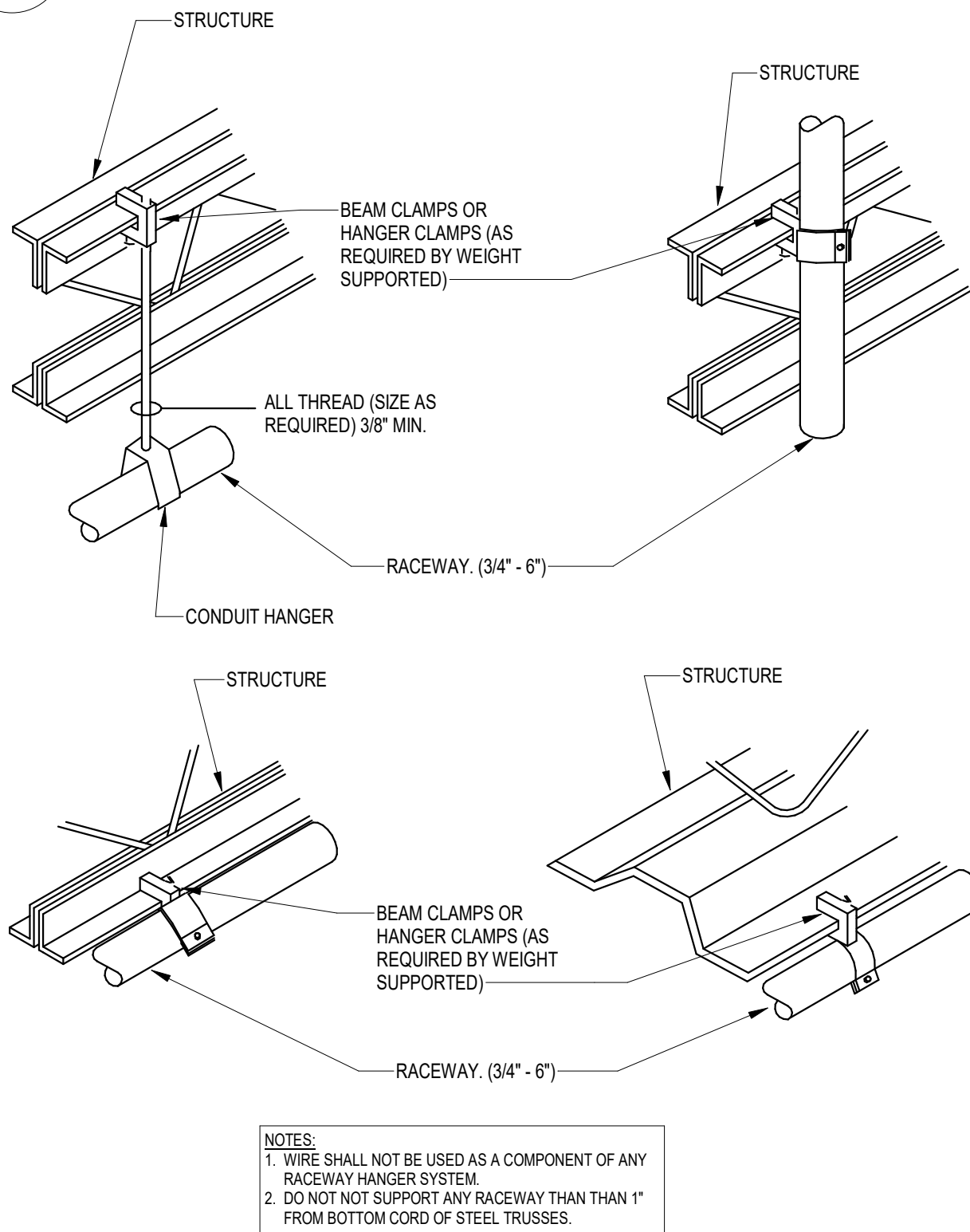
3 ROUGH-IN DETAIL
EE501 NO SCALE



10 LOW VOLTAGE SWITCH DETAIL
EE501 NO SCALE

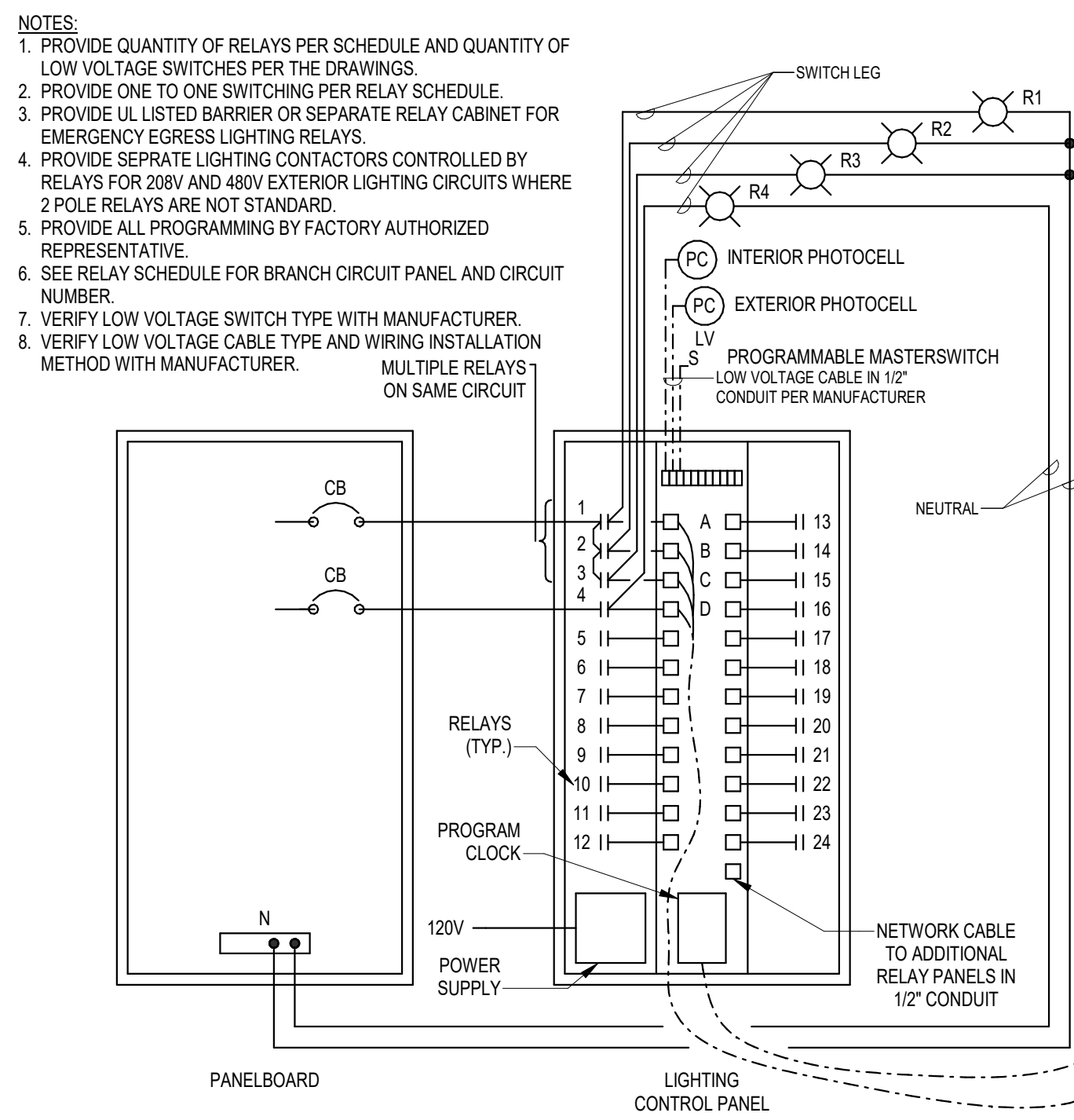


9 ELECTRIC WATER COOLER (EWC) DIAGRAM
EE501 NO SCALE

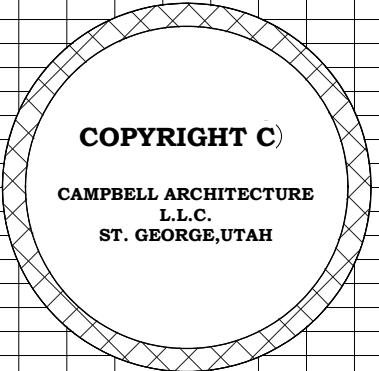


8 RACEWAY SUPPORT METHODS DIAGRAM
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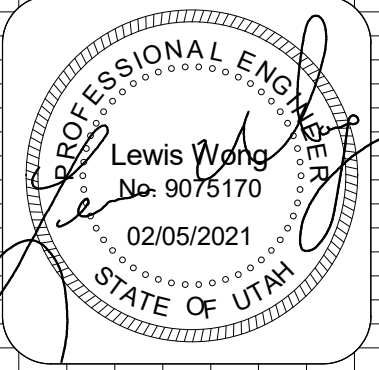
6 TRAPEZE SUPPORT DETAIL
EE501 NO SCALE



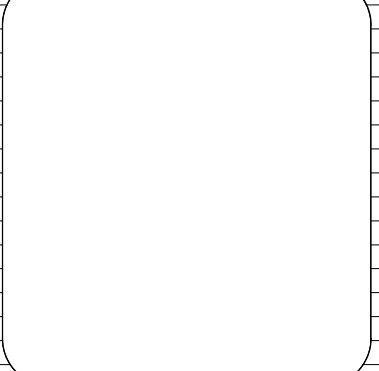
5 PROGRAMMABLE LIGHTING CONTROL DETAIL
EE501 NO SCALE



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ELECTRICAL
DETAILS

EE501

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Murray, UT 84107 801.530.3148 F
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- GENERAL NOTES
- A. EC SHALL COORDINATE WITH ALL OTHER TRADES DURING DEMOLITION AND CONSTRUCTION TO FACILITATE TIMELY WORK.

B. ALL AREAS ARE TO BE KEPT CLEAN AND CLEAR OF DEBRIS AT ALL TIMES.

C. CONTRACTOR SHALL PATCH AND REPAIR ALL WALLS, CEILINGS ETC. TO MATCH EXISTING CONDITIONS.

D. ROUTE ALL CONDUIT IN A NEAT AND ORDERLY FASHION. ALL CONDUIT IN FINISHED SPACES SHALL BE CONCEALED ABOVE CEILINGS OR IN WALLS UNLESS OTHERWISE INDICATED ON THE PLANS.

E. PROVIDE CLEAR, TYPED, P-TOUCH LABELS ON THE COVERPLATE OF ALL RECEPTACLES INDICATING THE PANEL AND CIRCUIT NUMBER ITS IS TIED TO. LABEL SHALL BE 1/8" LONGER THAN TEXT ON BOTH ENDS.

F. PROVIDE UPDATED TYPED CIRCUIT DIRECTORY WITH UNIQUE CIRCUIT DESCRIPTIONS PER NEC 408.4 FOR PANELS AFFECTED BY THIS PROJECT.

G. PROVIDE RED DEVICE AND FIREPLATE FOR DEVICES ON UPS.

SHEET KEYNOTES

- C2

PROVIDE FLUSH MOUNTED J-BOX IN CEILING FOR WIRELESS ACCESS. RUN A PINK CAT6A CABLE TO SERVER ROOM. ROUTE CABLE IN 1" C IN INACCESSIBLE OR EXPOSED CEILING SPACES.
- P1

PROVIDE 8' H x 3/4" THICK PLYWOOD FOR TELEPHONE TERMINAL BOARD (TTB). WIDTH TO BE 4' WIDE MINIMUM OR AS SHOWN ON PLAN. PAINT WITH FIRE RETARDANT PAINT. PROVIDE #6 BC GROUND CONDUCTOR CONNECTED TO MAIN ELECTRICAL SERVICE GROUND.
- P3

PROVIDE 120V POWER CONNECTION TO FIRE ALARM CONTROL PANEL.
- P4

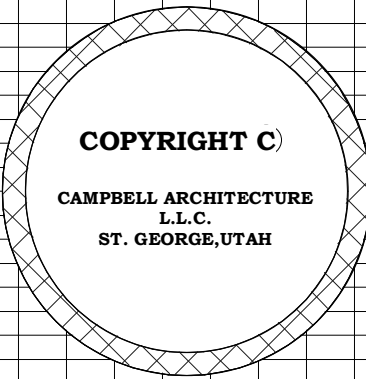
PROVIDE A MULTI-COMPARTMENT RECESSED FLOOR BOX WITH HINGED METAL COVER FOR POWER AND DATA. ROUTE 1 1/4" C W/ PULLSTRING FROM FLOOR BOX TO NEAREST WALL AND TERMINATE ABOVE NEAREST ACCESSIBLE CEILING. X-RAY AND CORE DRILL PER SPECIFICATION. COORDINATE WITH BUILDING OWNER PRIOR TO WORK.
- P5

POWER AND DATA FOR FLAT SCREEN TV. PROVIDE A 4-GANG RECESSED STEEL TV BOX EQUAL TO ARLINGTON TVBS613 WITH A SURGE-PROTECTIVE RECEPTACLE. COORDINATE EXACT HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN. RUN A 2"C WITH PULLSTRING TO FROM THE J-BOX TO THE NEAREST ACCESSIBLE CEILING SPACE AND TO THE RECESSED FLOOR BOX IN THE ROOM.
- P7

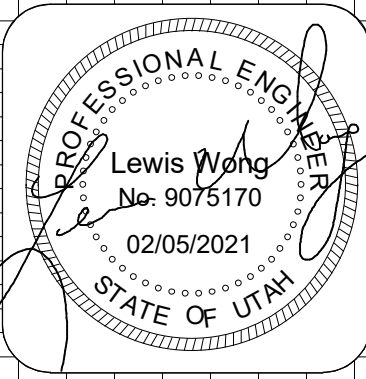
FURNISH AND INSTALL A METALLIC TOMBSTONE OUTLET AT LOCATION SHOWN.
- P13

FURNISH AND INSTALL AN EXPANDABLE 8KVA UPS EQUIVALENT TO APC #SYA8K16P.
- P14

INSTALL A J-BOX IN APPROXIMATE LOCATION FOR FUTURE POWER. RUN 3/4"C WITH PULLSTRING FROM J-BOX TO NEAREST ACCESSIBLE CEILING.



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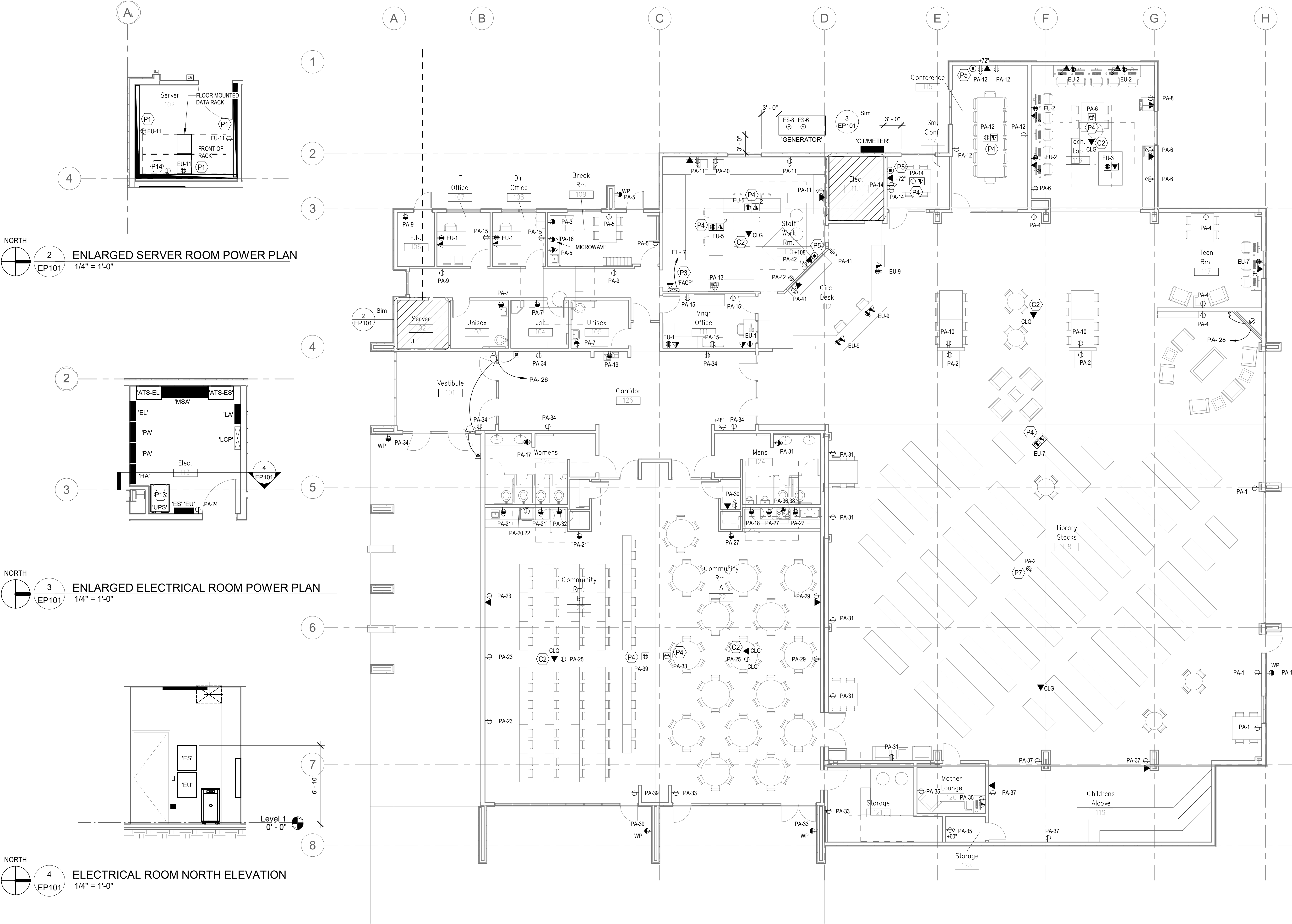


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POWER PLAN

EP101



2

ENLARGED SERVER ROOM POWER PLAN

1/4" = 1'-0"

3

ENLARGED ELECTRICAL ROOM POWER PLAN

1/4" = 1'-0"

4

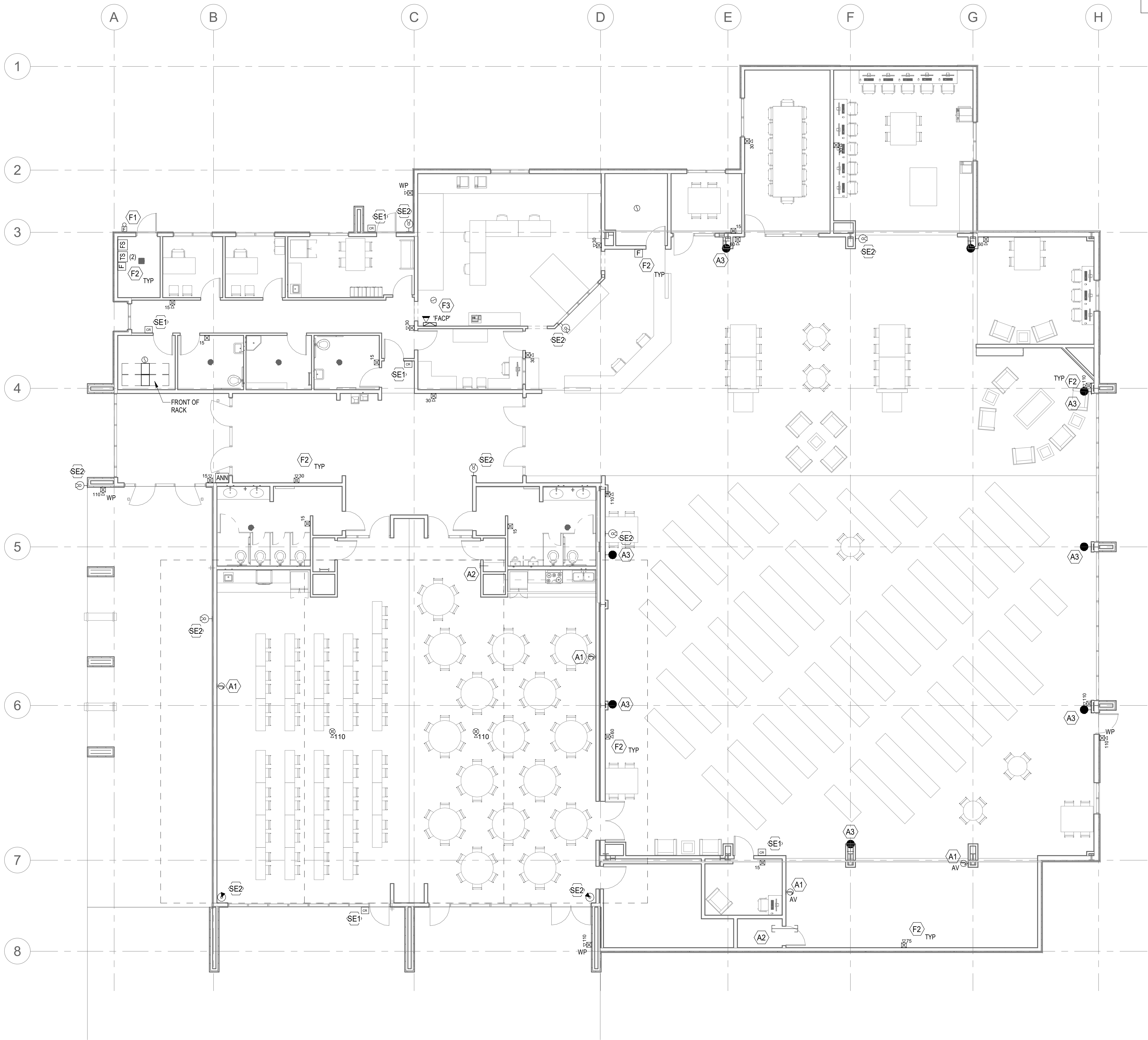
ELECTRICAL ROOM NORTH ELEVATION

1/4" = 1'-0"

1

LEVEL 1 POWER PLAN

1/8" = 1'-0"

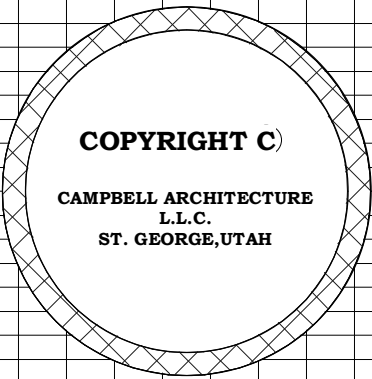


GENERAL NOTES

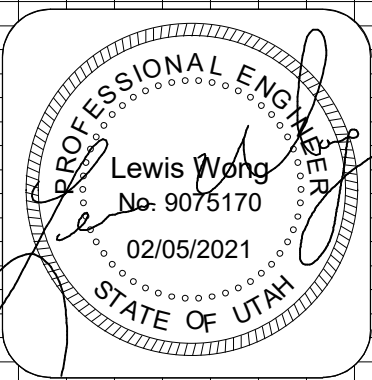
- A. COORDINATE FIRE ALARM DEVICES WITH LIGHTING FIXTURES, SPEAKERS, MECHANICAL DIFFUSERS, ETC.
- B. CONTRACTOR TO MARK PROVISIONS TO MEET THE INTELLIGIBILITY REQUIREMENTS OF NFPA 72 AND TEST AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
- C. PROVIDE A COMPLETE CODE COMPLIANT FIRE ALARM SYSTEM APPROVED BY THE AUTHORITY HAVING JURISDICTION.

SHEET KEYNOTES

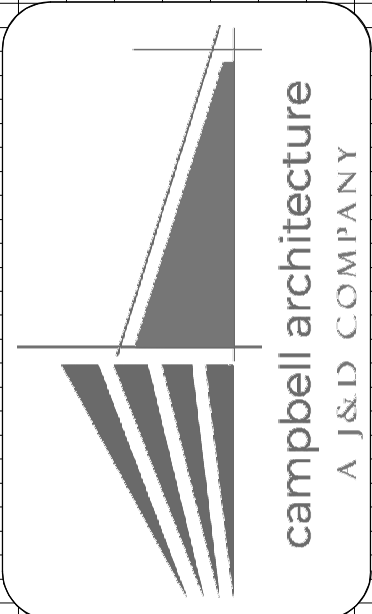
- A1 MOUNT 4" SQ. JUNCTION BOX WITH SINGLE GANG MUD RING ADJACENT TO OUTLET. ROUTE A (2) 1-1/4" C WITH PULLSTRING FROM JUNCTION BOX TO NEAREST ACCESSIBLE CEILING SPACE FOR AV.
- A2 STUB A 4" C THROUGH WALL ABOVE THE CEILING FOR AV.
- A3 MOUNT 4" SQ. JUNCTION BOX WITH SINGLE GANG MUD RING FOR WALL MOUNTED SPEAKER LOCATION. MOUNT AT 8'-10" AFF ON NORTH WALL AND 11' AFF FOR OTHER WALLS. ROUTE A 1-1/4" C WITH PULLSTRING FROM JUNCTION BOX UNDERSLAB TO CIRCULATION DESK AREA FOR P.A. SYSTEM. COORDINATE EXACT LOCATION OF P.A. HEAD END EQUIPMENT WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN.
- F1 WEATHERPROOF EXTERIOR HORN/STROBE FOR WATER FLOW AND INDICATION. MOUNT NEAR EXTERIOR FIRE DEPARTMENT CONNECTION.
- F2 FURNISH AND INSTALL ADDRESSABLE FIRE ALARM DEVICE AS SHOWN. UTILIZE CLASS A LOOP. TEST AND CERTIFY UPON COMPLETION.
- F3 FURNISH AND INSTALL A SMOKE DETECTOR DIRECTLY ABOVE AND IN FRONT OF THE FIRE ALARM NAC PANEL.
- SE1 PROVIDE RACEWAYS, J-BOXES, AND 120V POWER FOR CARD ACCESS AT DOOR. COORDINATE WITH CARD ACCESS MANUFACTURER AND ARCHITECTURAL HARDWARE PLANS FOR ELECTRIFIED DEVICES. PROVIDE 120V EMERGENCY POWER AS REQUIRED ON A DEDICATED CIRCUIT THAT ONLY FEEDS ACCESS CONTROL SYSTEM.
- SE2 RUN A PINK CAT6A CABLE TO APPROXIMATE LOCATION FOR POE CAMERA.



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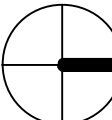
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SYSTEMS PLAN

EY101

NORTH



1
EY101

LEVEL 1 SYSTEMS PLAN
1/8" = 1'-0"



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Murray · Logan · St. George · Temple
181 East 900 South 801.530.3148 T
Murray, UT 84107 801.530.3150 F
VBFA Project Number: 20419